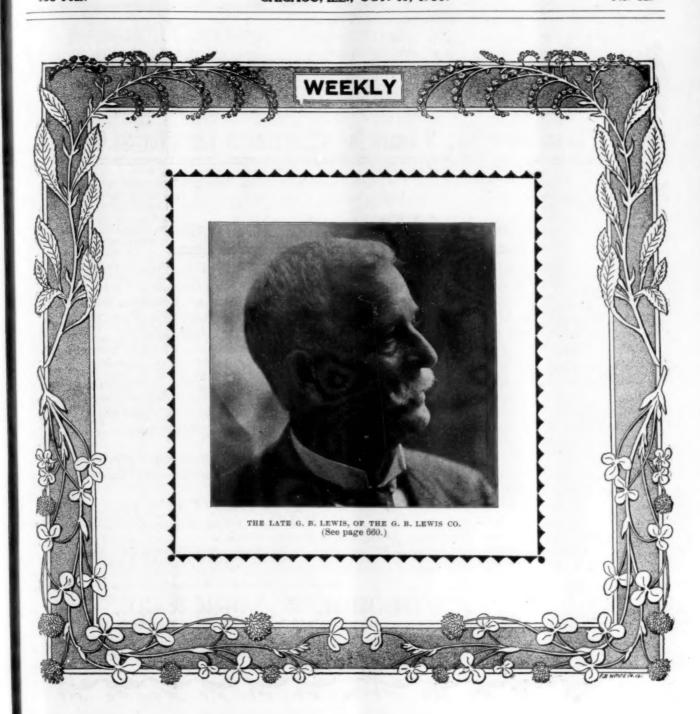
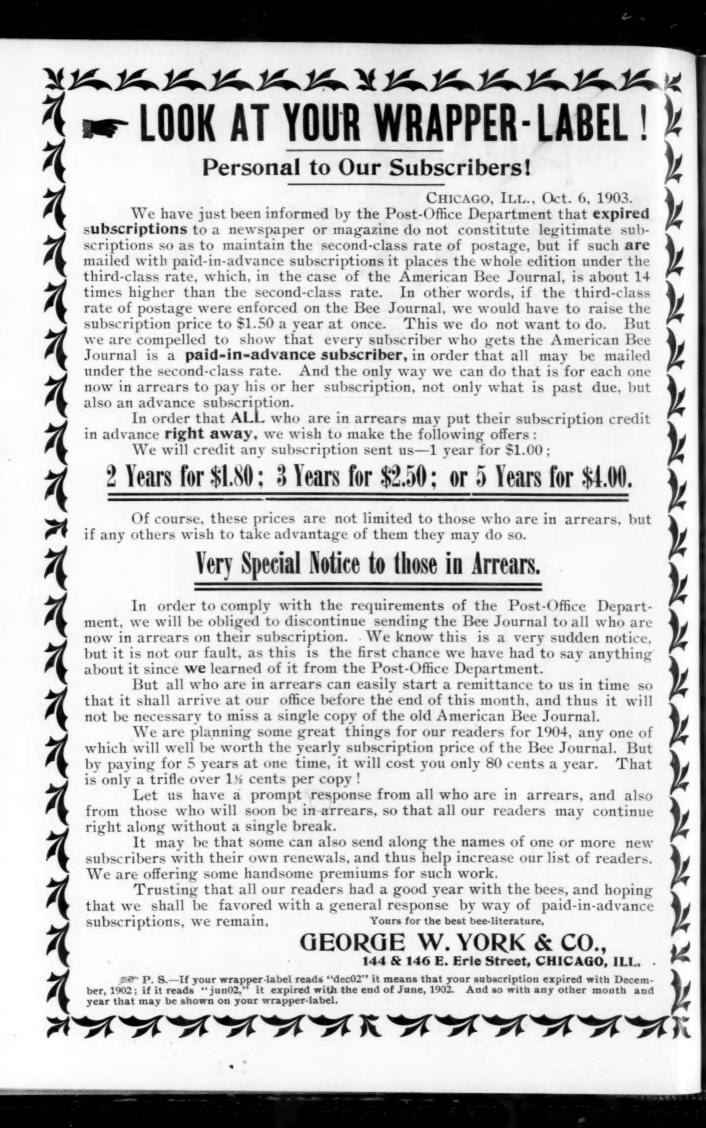
# BEE JOURNAL

43d Year.

CHICAGO, ILL., OCT. 15, 1903.

No. 42.





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## **Editorial Comments**

Late Once in 20 Years.—So far as we can recall, for the first time in 20 years the American Bee Journal was not mailed last week on time, or at the regular time. It was just two days late in leaving our office for the post-office. But it was no fault of ours. We sent the forms to press on Monday morning, Oct. 5, at the usual time, but just as it was all ready to be printed, the press-feeders went out on a strike. The firm who does our press-work then tried to get some other printing firm to print it, and finally succeeded; but that firm was also handicapped on account of the strike, so that it was almost impossible to finish it at all last week. However, on Saturday (instead of Wednesday) we got the last of the copies, and rushed them off to the post-office, after wrapping them.

We regretted the delay very much indeed, as we had made a fair record for promptness in getting out the American Bee Journal every week for many years. But our subscribers will now know the reason why it could not be mailed on time last week, and doubtless will hope, with us, that it may be another 20 years ere it need be late again.

Peculiarities of the Past Season.—Over a considerable scope of country there has been an abnormal amount of swarming, and that, too, with an unusual honey-flow. Hot days, and especially hot nights with prevalent sunshine, are considered the proper thing to accompany a heavy honey-flow; the best time for storing being just as farmers begin to complain of drouth; this year the flow seemed to go right along with cool, cloudy, and damp weather. One of the veterans, who had an unusually heavy harvest, reported:

"When bees are crazy over a big harvest you can do pretty much what you please with them without fear of being stung; but this year breaks the rule; I never had such cross bees in my life."

To the question whether he had not worked into a cross strain of bees, he replied:

"No, it happens that I have pretty clear evidence on that point. The crossest colony of this year had a queen four years old; the blood in that colony ought to be the same as in the preceding two or three years, yet in those years that colony never distinguished itself for crossness?"

Foul Brood and Wild Bees.—It has been a discouraging thought that no matter how careful one might be in one's own apiary, there was always the fear that foul brood might be lurking in trees occupied by wild bees in the vicinity. General Manager France speaks reassuring words with regard to this, saying that we need have little anxiety, for whenever a diseased wild colony dies out so as to leave its combs and remaining stores a center of infection, the squirrels, and perhaps other things, promptly clean out all that is left to do harm.

National Bee-Keepers' Association—Its Province.— Never in the history of the Association has there been such a rapid accession of members as at the present time. There is no good reason why this should not continue. Indeed, if bee-keepers were not blind to their own interests there would be a membership many times as large, for every bee-keeper in the land should become a member.

It is not well, however, that there should be any misapprehension

on the part of recruits. There have been those who seem to have thought that they could wait outside till some trouble occurred, and then the Association would stand ready to receive them with open arms to take up their fight for them. A very little thought will show the absurdity of such a thing. It would be much like a man living without any fire insurance until his house was burning, and then expect to have the loss made good by a company in which he would insure after his house was in ashes.

Neither should it be understood that a member of the Association is at liberty to foment trouble, get into all sorts of quarrels with his neighbors, and then complacently folding his arms sit back and say to the Association: "There, now, I've stirred the thing up good and hot; you go ahead and finish the fight." It must be remembered that justice is not necessarily always on the side of the bee-keeper, and it would be a sorry thing to have a combination for the support of injustice.

Let each member do all in his power to keep in peace with the world "and the rest of mankind," and then if the attempt is made unjustly to oppress him, he may confidently rely upon aid from the Association to such an extent as seems right in the judgment of its officers.

A Great Swarming Year has been the year 1903, in certain portions at least. Many report excessive swarming, and stray swarms seem to have been flying through the air in all directions. It is well known that the Dadants have heretofore had very little swarming, not to exceed 5 percent. This year C. P. Dadant reports a perfect avalanche of swarming; and this with an exceptionally heavy yield of honey.

It has generally been understood that when bees begin to store heavily they give up all foolishness in the way of swarming, and devote all their energies to saving the precious flood of nectar. This year it seemed to work the other way—the more they gathered the more they swarmed.

Will we ever learn any definite laws by which bees are governed?

Take Sections Off.—Here and there will be probably still found supers of sections on the hives, where all storing has ceased. Perhaps a super was put on late, and the bees have not begun work in it at all. The bee-keeper thinks there is no immediate hurry, there is no honey in the sections, and so it goes on day after day, with the thought that so long as there is little or no honey in the sections they may as well be on the hives as elsewhere. A serious mistake, for in most places there will be propolis varnished over the comb or foundation to such an extent that the appearance is marred, and if the case is bad enough the bees will refuse to accept such sections the following year. If any beginner still has sections on the hives where the the bees are not storing, let him lose no time in hurrying them off.

Formaldehyde, as a destroyer of the spores of foul brood, is still on trial. Cases are reported in which it has seemed effective, but so long as there are others in which growth of spores occurred after treatment, it will hardly do yet to place entire dependence on the drug. The question now is, whether the cases of failure were due to the inefficiency of the drug, or whether something different in manipulation might have produced different results. It is asking a good deal of any disinfecting agent to dig down into the bottom of a cell filled with pollen and honey, and there destroy a thing so tenacious of life as a spore of bacillus alvei. Can formaldehyde gas do it?

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## **Sketches of Beedomites**

#### GEORGE B. LEWIS.

A short time ago we received the following notice from the G. B. Lewis Co., of Watertown, Wis.:

GEORGE W. YORK & Co., Chicago, Ill.—

Gentlemen:—We have just discovered that through an error you were not advised of the death of our president, Mr. G. B. Lewis, which occurred June 11, 1903. We herewith enclose newspaper clipping. Yours truly, G. B. LEWIS CO. Per G. C. L.

The clipping referred to in the above reads thus:

George Burnham Lewis, a prominent manufacturer and business man, president of the G. B. Lewis Co., died at his home shortly after 9 o'clock last night. His death was not unexpected, as he had been in a dangerous condition several days. Hardening of the arteries was the primary cause of his death.

Mr. Lewis was born in Moreau, Saratoga Co., N. Y., July 5, 1832. He received an education in his native city, and when a young man of 21 came West, reaching this city in 1853, where he remained during the summer visiting with his brothers who had preceded him here. He returned to New York in the fall, and shortly after was married to Miss Sarah J. Ingalsbe. Mr. Lewis tried farming for awhile, but his thoughts reverted to Wisconsin, and in 1861 he removed to this city, and has lived here ever since. In company with his brother, R. E. Lewis, he purchased the water-power on the west bank of Rock river, then owned by a man named Salsey. The firm name was then R. E. & G. B. Lewis, and after sawing up the logs which were purchased with the mill and water-power, the firm engaged in the manufactured sash, doors, and blinds. In 1870, R. E. Lewis retired and G. B. Lewis became sole owner, and conducted the business until 1878, when the firm of Lewis & Parks was formed, and upon the death of Mr. Parks, his son-in-law, the firm became known as the G. B. Lewis Co., one of the largest manufactories of bee-keepers' supplies in this country. From a small beginning the business of the firm increased rapidly under his guidance and management, until it became one of the largest of its kind, with a manufactured product which sells all over the world. the world.

Mr. Lewis possessed a quiet and amiable disposition, and was a man of integrity. In his business and social life he displayed those characteristics which are so much admired, and those who had occasion to have business or social intercourse with him always had a kind word to say in praise of his many good qualities. Mr. Lewis never aspired to political honors, preferring the quiet of his home. For the last 20 years he has passed the winter months in Dunedin, Fla., where he has large property interests, and it was while there, early this spring, that he was taken sick. He returned home in April, and has gradually failed in health until released from earthly suffering by the hand of Death. By his death Watertown loses one of its oldest and most progressive business men, and an honorable citizen who always most progressive business men, and an honorable citizen who always took pride in his home city, and helped in its upbuilding. He will be sadly missed from the family and home circle, and by his many friends and acquaintances here and throughout the State.

His widow and two children, Mrs. L. L. Parks and George C. Lewis, of this city, survive.

Verily, the leaders among bee-keepers and bee-supply manufacturers are passing away. It was not our pleasure to have a personal acquaintance with Mr. Lewis, though, of course, we have had business relations with the firm of G. B. Lewis Co. for years. And it was always satisfactory in every way. That company has been represented in our advertising columns for over 20 years, we believe, and, so far as we know, their dealings with our readers have always been mutually pleasant and profitable.

The fact is, the G. B. Lewis Co. is one of the strong, clean, business-like bee-supply manufacturers and dealers of which all beedom should be proud. We understand all of that was characteristic of Mr. George B. Lewis. And that same honorable dealing is continued by his son, Mr. George C. Lewis, who has been manager of the business for years. We wish the firm continued success, although the honored President has been taken away permanently.

Why Not Help a Little-both your neighbor bee-keepers and the old American Bee Journal-by sending to us the names and addresses of such as you may know do not now get this journal? We will be glad to send them sample copies, so that they may become acquainted with the paper, and subscribe for it, thus putting themselves in the line of success with bees. Perhaps you can get them to subscribe, send in their dollars, and secure for your trouble some of the premiums we are constantly offering as rewards for such effort.

## **Miscellaneous Items**

SUNDAY IN CALIFORNIA .- In the first few paragraphs of the report of the Los Angeles convention, reference was made to the Sunday-school of the First M. E. church of that city. We had read and heard so much about that school previous to leaving Chicago, that we decided to visit it if we ever should be in or near Los Angeles on 8unday. So the coveted opportunity came on Aug. 23.

As mentioned last week, we spent Saturday night at Pasadena. So, we arose early Sunday morning and prepared to take the electric car ride of some 10 miles to the church mentioned in Los Angeles. At the Sunday-school begins at 9:30, it was necessary to move lively for a Sunday morning.

We arrived just a few minutes before the school was opened by Dr. H. W. Brodbeck, the dentist brother of George W. Brodbeck, of whom we have spoken before. He has been the superintendent of the school for 11 years. He has it well organized, and everything running perfectly. One of the assistant lady superintendents very courteously showed us, and about a dozen other visitors, around through the various departments of the school. This was appreciated by all

The bee-keepers present were, Dr. C. C. Miller, A. I. Root, O. L. Hershiser, W. F. Marks, and F. E. Brown, besides the writer. If we mistake not, each of those mentioned attends the church of a different denomination excepting us, and yet all seemed perfectly at home in our Methodist school.

Dr. Brodbeck may well be proud of his excellent Sunday-school. It has an orchestra of about 30 instruments. Just think of what harmonies they can produce! It is an inspiration to any superintendent or school to have such an orchestra. It also has an efficient corps of officers and teachers-"each one an expert."

The school has enrolled about 1000 members. It has perhaps the best system of records known. Dr. Brodbeck got it up himself, so it ought to be a good one.

After the study of the lesson, Dr. Miller and A. I. Root were invited to speak to the main school, while we were asked to say a few words to the members of the young men's and young ladies' classes, which have their closing exercises together. There were probably 150 present on that occasion. How we wished we could have known enough to be equal to the opportunity. Who wouldn't give a great deal, if he had it, to be able to interest such an audience, even for a short time?

We believe both of these large classes were taught by ladies, Think what it means to hold the attention of a hundred or more young men every Sunday, and interest them profitably!

We can say we felt well repaid for making the effort to visit one of the greatest Sunday-schools in all the West.

After the close of the school, we bee-keeping visitors all went across the street to hear Robert J. Burdette preach. He has left the lecture platform, and is now the pastor of the Temple Baptist church in Los Angeles. He gave a splendid discourse. But we couldn't help feeling that the lecture-field needed him more than the pulpit.

By the way, we understand Mr. Burdette, several years ago, married a very wealthy lady, who resides, and owns a palace, in beautiful Pasadera. We passed by that lovely home with its gorgeous flowers and restful greenswards, when "Seeing Pasadena" the following day.

On Sunday evening we attended the First M. E. church of Passdena. The building and interior finishings and furnishings were simply superb. It is a Methodist cathedral. It cost something like \$100,000, we believe. Too much for any church. We believe in less pretentious church buildings, and more of them scattered throughout

The organ and music in this particular Pasadena church was grand. The audience was large and attentive. The talk by the pastor was helpful. He stopped when he got through. Not every speaker can do that. Their "terminal facilities" are not always what they should be. But those Pasadena Methodists ought to be a happy and thoroughly good people. We suppose they are. tainly saw no reason to be doubtful about it.

Judging from what we saw and heard on that one Sunday, in Los Angeles and Pasadena, we should say that not a few of their people attend church.

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On returning to the home of our cousin, Mrs. Otto Freeman, after the evening service, we were quite ready to retire and get a good rest for the following day, which was to be the last of our stay in "Sunset Land.

Next week we will give the last installment of these rambling notes. It will be Pasadena and homeward bound. Both delightful to coatemplate.

HERBERT CLUTE, a bee-keeper in Chippewa Co., Wis., reports a crop of 37,000 pounds of extracted honey taken from 333 colonies the past season.

HERMAN L. GLOEGE, of Green Co., Wis., called on us last week. He reported 112 colonies, and a harvest of about 4500 pounds of honey, mostly comb.

A "FOWL" BEE-MAN .-- We notice that one of the foul-broad inspectors has envelopes and letterheads with "Fowl Brood Inspector" printed on them. That's pretty rich. First thing that inspector knows he'll be taken for a "chicken-lifter."

MR. HASTY has a very just complaint against the proof-reader. On page 633, he wrote about the bee flourishing her ligula, and we got it, "flourish her liquid." He wants to know what we think about that. Well, we think it was a bad break on the part of this paper. The promise is to try to do better in the future—if forgiven this time!

GENERAL MANAGER N. E. FRANCE reports as follows on the present membership of the National Bee-Keepers' Association:

990 members enrolled when he took hold less than a year ago.
569 new members enrolled during his term thus far, or an average increase of 81 members per month.
1559 was the total enrollment Oct. 5, 1903.
175 memberships at that time had expired, and should be renewed

We consider the foregoing an excellent membership report. The increase has been very encouraging, indeed. But there should easily be enrolled a membership of 2000 before the next annual meeting of the National. Why not?

N. E. FRANCE, the well-known inspector of apiaries for Wisconsin, has lately been out on his inspection work, concerning which a local newspaper in Clark County had this to say:

N. E. France, who has been in this vicinity recently, reports that honey-producers in this part of the State are selling their extracted honey at a lower figure than they need to do, many of them letting it go at 6 cents, when they might have at least 7 cents. The crop in Wisconsin this year is estimated at 3,000,000 pounds, which would take 150 freight-cars to move it. Mr. France was here the last of July and found foul brood prevalent to a considerable extent. He gave instructions for treating these affected colonies, and in one instance tried the experiment which has been widely recommended in bee-papers, of using formalin gas. He found on this last visit that all colonies were free of disease except the ones treated with the formalin gas, some of the combs still being affected. This yard is quarantined until spring, when Mr. France will be back and personally treat the disease.

Mr. France writes us that the experiment mentioned above was with 200 combs, all being fumigated with formalin gas, using double Weber's amount of gas or formalin, Weber's lamp, etc. All were afterward put in clean hives, and bees put on them. Every colony became re-diseased.

WISCONSIN BEARS still like honey, if we may judge from the following taken from a recent copy of a Greenwood, Clark Co., news-

Bears are getting rather numerous around bee-yards in this section. Nearly a couple of weeks ago a bear visited M. H. Wright's apianous on the Eau Claire river three different times, and was shot at by the owner without success, on account of the darkness. Finally, Mr. Wright got near enough to Mr. Bruin to see him cuff the tops from

Wright got near enough to Mr. Bruin to see him curt the tops from the hives and take out a section of honey, and when he stood up to eat it, he was enabled to get a line on him by lying on the ground, so as to get the bear between himself and the sky line.

At Severson's Popple river apiary a bear, or bears, have broken into a dozen or more hives, and some of them have been completely demolished. So far the mischief-makers are at large, they doing their work at night when it is hard to see them to get a shot at them.

So it seems that Wisconsin is still on the frontier, and wild game abounds. We supposed that Sir Bruin had passed on from Wisconsin, but he seems to get around in time to help unload the honey from the hives. But Mr. Wright got some of Mr. Bear's tenderloin, all right. Wonder how it tastes when made out of honey! Ought to be doubly sweet and palatable.

## **Convention Proceedings**

#### THE LOS ANGELES CONVENTION.

Report of the Proceedings of the 34th Annual Meeting of the National Bee-Keepers' Association, Held at Los Angeles, Calif., Aug. 18, 19 and 20, 1903.

Continued from page 648.)

Dr. Miller—Before that question about the queens is entirely passed, I would like to ask a question. Suppose, Mr. McIntyre, that you had a hybrid queen and the colony gave you an exceptional yield, away beyond anything else in your apiary and you never expected to sell a queen in your

life, would you breed from that queen?

Mr. McIntyre—That is a pretty hard one, Doctor. I can answer that in Dr. Miller's own language—"I don't know."

Mr. Hyde—We have with us another extracted-honey producer, Mr. Dadant, and I am sure we would all like to

hear from him.

C. P. Dadant—I feel like saying something in regard to the cold knife. We have tried both the cold and hot knife, and have stayed by the cold knife. There are times, however, when it is impossible to uncap honey with a cold knife. In the fall of the year, in our neighborhood, it is pretty cold at night, and after the honey is off the hive a little while it gets cold and thick, and the knife, instead of cutting, breaks the comb. Now, when it is fresh from the hive and warm, the cold knife will do splendidly. I think when combs are not off the hive too long, and are warm, the cold knife is all right; but you let them rest awhile, and the honey gets thicker, you will have to use a warm knife. I would not recommend extracting the honey when the combs are cold. It is much more difficult to uncap it, and much more difficult to extract the honey. We always exhear from him. much more difficult to extract the honey. We always extract the honey as soon as it is off the hive, for, when it gets cold, it is much more difficult to handle, and, of course, a man who extracts a good deal must consider all these

Prof. Cook—I would like to hear from Mr. Dadant on the question of the hybrid queen for breeding purposes. Mr. Dadant—I think we have just as good queens among

Italians as among the hybrids.
Dr. Miller—But the condition is that you have one that

Mr. Dadant—Well, in an impossible case we could have impossible results. [Laughter.]

Dr. Miller—More than once I have had hybrids that were superior to any of the pure ones.

Mr. Dadant—I have heard more comparison between Italian and Cyprian. I have had Cyprians, quite a good many. I have noticed one thing which perhaps some of you may not have noticed. There are exceptions to all the you may not have noticed. There are exceptions to all the rules, however. The mating of a cross Cyprian queen with a drone from the quiet Italian colony will produce a mild and gentle type of bees, the moral qualities coming from the male, while the other qualities come from the female. These seem just as quiet to handle as pure Italians. But take the Italian queen and cross her with a black drone, and you have the crossest bees, unless it is the Italian queen crossed with the Cyprian drone. I think, as a rule, it will prove to be so, that the mating of a quiet race on the drone side will produce quiet bees.

side will produce quiet bees.

Albert B. Mellen—Will Dr. Miller please tell us what
he would do about breeding from a hybrid queen that excels

he would do about breeding from a hybrid queen that excels all others in his apiary?

Dr. Miller—To get even with Mr. McIntyre, I would better say, I won't tell. I will tell you what I have done. The colony that produces the largest yield of honey this year will be marked, and most likely be bred from next year without any regard to stripes or color.

Frank Benton—The question is, How to make money producing extracted honey? Now, of course, all of these points, as to the use of the hot or cold knife, the super with shallow combs. or deep combs, and so on, all come into con-

shallow combs, or deep combs, and so on, all come into con-sideration; also the question of bee-escapes. All these are

mechanical points, you may say, things that will settle themselves for each man. But I do not think Mr. McIntyre brought forward strong enough some large points-vital points—as compared with these. The question is how to get a large quantity of honey. Now, I believe we are losing tons and tons of honey by prejudice against certain strains or types of bees. A man that produces 20 tons of honey might produce 30 if he had the right kind of bees to gather it; and where he is producing 20 tons of honey he gather it; and where he is producing 20 tons of honey he can increase that by half by care in the selection of his bees. The right bees for the locality, and the right queens, might enable him to gather an added 50 percent.

Now, I will come down to the particular point I wish to bring forward. The Cyprian bees possess more energy than any other race of bees I know of. I handled them for years in the Island of Cyprus, extensively there and also in other countries. They have a disagreeable stinging trait. Their tongues have been measured by a great many different people. I have done something in that direction which has been confirmed by others. Their tongues are the longest of any bees-at least, as long as any of the Eastern races, and longer than any other European types. They can fly farther, have greater wing-power in proportion to the size of the hodies. There is large wing-spread that has come of the bodies. There is large wing-spread that has come through centuries of dwelling in the Island of Cyprus. I think it wrong to reject that type of bees, because they possess more power in transmitting their race or progeny than any other race I know of. With this element we should not ignore a strong-wing quality, and the fact that they are among the most prolific of European races, or beyond any type whatever. Of course, we want a bee that we can handle, and that brings the difficulty.

We have in Austria a type extremely gentle. Another type in southeastern Russia is an extremely gentle bee. Both of these bees are prolific; both of them good honey-

gatherers.

Now, confining myself more particularly to the Carnio-lan—the bee of Europe—this is the hardiest bee that I know anything about. If we can eliminate some of its poor qualities and unite it with the Cyprians, we would have the ideal bee. I conceived that notion some 15 years ago, that we might, by crossing these bees, get the good qualities of each combined. While I was in Munich, Germany, I had sent a large number of Cyprian bees, that had been mated there, back to me. I tested them in that raw region, nearly 2000 feet above the sea-level, and I found them superior to any others we had there. I have printed the results of these experiments in some circulars which I have brought with me. Two years later I went to Austria and took with me a pure Cyprian queen, and had that mated to Carniolan drones. The same experience came to me, but not content with that, still I have followed down many and various crosses be-tween these two races since then up to the present time, sometimes a large number and sometimes a small number. I have sent these bees into different regions of this country, where the winds are high, and where it is important to breed up rapidly in the spring, particularly. Where alfalfa, the first crop, would be an important item, people have told me that these bees with this blood increased their honeyyield, and increased their colonies at the same time very materially. Some have said they doubled their colonies. I am merely calling attention to what we are losing by rejecting these bees on account of their color, etc. Mr. McIntyre did not like to cross these bees; they would be rejected because they are hybrids, but would produce bees that would be acceptable on account of their color. Are they not just as much hybrids?

Now, it is just as easy to breed Carniolans that have yellow stripes on them. I have traveled all over Carniola, and have never seen a single colony there where there were not some yellow-banded bees, and I conceived the idea that a grey-colored bee with yellow queens would be very nice to have, and before my departure from that province I to have, and before my departure from that province I selected a set of yellow queens that would produce entirely grey workers, and the tendency was to have the yellow crop out on the workers. I tried to avoid that, but you see it would be to produce yellow Carniolans, and we would not have those hybrid bees, would we, because they are all yellow? Now, that cross-bred bee is not cross. It is amenable to smoke; it has the energy of the Cyprian, the prolificness of the Cyprian, and the hardiness of the Carniolan. We of the Cyprian, and the hardiness of the Carniolan. have, therefore, all the really good qualities and important qualities of the Cyprian, including their great wing-power and their energy, their disposition to fly farther, their long tongues, and the hardiness of the Carniolans. By continuing to mate pure Cyprians to the pure Carniolans, I think a constant type could be established, and I find that is pref-

erable to an unfixed type. I find in the spring, when the wind is cold, and many of the bees that leave the hives will drop down on the ground, these cross-bred bees, these hybrids, will actually get back into the colonies, and will fly strongly when others do not dare venture out, and they will gain something. The bees that do not get back into the hive will make a great difference in the honey produced. Coupled with all these other qualities, I am prepared to say that with all my experience of 11 years in foreign countries, and some 30 years since I began handling bees, I have not found anything to excel these bees. I believe the most important point in the production of honey is care in the selection of strains or types of bees.

Secondly, I requeen in the latter part of the year. I take pains to see that the new queens are bred from the very best queens I can produce. I select only large, prolific very best queens I can produce. I select only large, profific queens. I want those that will produce 20 to 25 queens to the brood. With these, I believe, we have gotten the two most important points in the production of extracted honey.

J. K. Williamson—Several years ago I put about 30 Carniolan queens into the apiary for Mr. Wheeler. My partner and I afterwards bought that apiary. The Carniolan queens, perhaps, were mostly superseded before we bought it, but the nearest Carniolans in the apiary after we got it were the bees that brought in the biggest amount of honey.

H. H. Moe-I would like to ask Mr. Benton how many queens he rears out of a good, strong colony-how many

cells does he start?

Frank Benton-Well, I sometimes start 100 in a colony to get good, well-developed queens. I have seen in the hives of some of these Eastern races of bees, where they had prepared sometimes as high as 250 cells, nearly all producing well-developed queens. It is a mistaken idea to suppose a large number could not develop. Simply because our Italians and blacks do not produce a large number is no reason why we should not get them. I do not hesitate to rear anywhere from 50 to 100. I would not hesitate to rear

200 if I had a powerful colony. Mr. Hyde—My views are the same. We have at pres ent five or six different strains, and we try to find out which are the best for all purposes. Cyprians are good bees for honey, but we can not stand the temper. Our men do not like to work where they are liable to be stung so often. We have decided to use nothing but Holy Land bees for our

Frank Benton—I may say I spent a good many days in apiaries in Palestine, and at the same time I had an apiary of over 200 colonies in Cyprus, and worked most of the time handling these bees with perfect impunity, while in Palestine I had to use clouds of smoke. Now, Syrian bees and bees of Palestine differ very much, and in the first importations brought to this country, in 1880, these two races were mixed, badly mixed, and the term "Holy Land" now covers them both. They differ considerably, and in temper are far inferior to the Cyprians. An occasional Cyprian colony shows as bad temper as a large number of bees of Palestine, but, all in all, the Cyprians are decidedly better tempered than these Holy Land bees. Where that does not hold good, the Cyprians have become hybridized, and likewise the Holy Lands, and this has brought in the gentle I have tested that.

Mr. Hyde—I would like to say that Mr. Benton must have gotten his from a different source than that from which we got ours. They are very gentle bees. I think they are as gentle as Italians; that is, pure Holy Land bees. I am not talking about something mixed up with

Cyprians.

Mr. Benton—I think you got them from Mr. Baldensperger, in Jerusalem. That is where I established an apiary myself—that very apiary. Further, I have had constant experience with these bees for years, and I have been in his apiary and traveled near them, and moved all their colonies, some 600. They were supplied to me all the time I was in the East, afterwards when I was in Munich, Germany. It is just possible that you got a gentic type of the bee. By the side of it you may get fierce ones. The same thing may occur, perhaps, with the Cyprian, though, perhaps, in four cases out of five you will get rather easily managed ones, while, in the fifth, rather fierce ones. It is just possible that you got a gentle type of that y the side of it you may get fierce ones. The same

Mr. Hyde-I would like to say that I got my stock of Cyprians from Mr. Benton! [Laughter.]

Mr. Delano—I had 200 colonies in one location and ided to move half away. The 100 I moved away were so decided to move half away. The 100 I moved away were so cross all that season that I could not go near them, nor any one else, unless fully prepared to do so, while the others in đ

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another location were not cross. Why was it? These were all reared from the same queens. I think the blood has

nothing to do with it.

Frank McNay—I think there is a good deal in location.
I have had the same experience as Mr. Delano. We moved a cortion of the apiary a number of miles away, and they were so cross all the time they were there it was almost impossible to handle them. On returning them to the same apiary they were as gentle as the others. I think the location has a great deal to do with it.

A Member—My question was, Is it not always the case that an apiary that is moved to a new location is generally

cross for awhile, or for the whole season?

Mr. McIntyre—Not always. If they are getting plenty of honey they will soon get over their crossness. Generally, when I move it is when they have plenty of honey, and they

Soon get over their crossness.

Mr. Andrews—That has been my experience, exactly.

After the oranges gave out this year my son and I moved
150 right over to the buckwheat fields. They began worktwice, and they were better-natured than when working in the orange flow, only a few miles move. But if they are not getting much honey, and it is hard to get what little they do get, it is very likely they will become cross.

Mr. Corey—I don't think Mr. Mendleson's bees stay in

one place long enough.

(Continued next week.)

## **Contributed Articles**

#### Putting Back Supers After Extracting.

BY C. P. DADANT.

Will you kindly pardon me for asking a question in regard to bees cleaning out the supers after extracting? I have read in your writings (I think it was in the American Bee Journal) that you give the combs, after extracting, in the care of the bees until cool weather comes and the time of storing them away. I tried that way last fall, and when I took them off I found some honey in every frame, and a great many of the empty cells sealed over. I run the combs through the extractor again and gave them back to the bees, but they failed to empty them. They would store what honey they found right in those cells, and I had to store them as they were. Some of the honey granulated, and in spring some of the honey was sour. I had to use them as they were, and I fear that I will have honey that will not keep.—J. S. HAAG, of Iowa.

We have had one or two experiences of that kind—just enough to know that those things rarely happen. You have evidently extracted your honey before the crop was fully ended, and the hives must have been very full. If the colonies are supplied with all the combs that they can possibly fill, they will not put so much honey in the hive-body that they have no room for the very last few pounds that are harvested. A point may even be reached when it will be necessary to crowd them for space in order to get them to place enough honey in the body for an abundant winter supply. But if the crop is long protracted, and the weather is warm, the colony strong in bees, and heavy with stores, the bees will often ascend in those supers and stay there. It becomes necessary, when removing the supers for winter, to brush or drive almost the entire colony out of those supers. This may be avoided by extracting late, say a few days after the first frost.

Then, in putting the combs back, do not place the supers directly over the uncovered brood-chamber, but use the enamel cloth, if you use one, or a perforated honey-board, or a burlap cover, between the supers and the hive-body, leaving just enough space so that they may go back and forth. This partition will make them feel that the supers are too remote from their brood to stay on them, and they will carry the honey down, if there is any room at all to

place it.

The amount of honey left in the supers after extracting, if it has been properly done, should be very insignificant, and ought to find a place in the hive-body without any diffi-

As to the bees sealing empty cells, we have seen that also; it is a freak for which it is difficult to account. They may do it because they have an excess of broken fragments

of wax which they dislike to throw away, but in an experience of some 35 years, we have seen this but once or twice.

The fact that honey, which is left sticking to the combs

after the extraction, is apt to sour is our reason for putting all the supers back on the hive at all times after extracting. There are many people who do not follow this practice, but who retain their supers, with the honey sticking to them just as they are after extracting, until the following spring. In a discussion of this matter in the Revue Internationale, of Geneva, it was found that the opinions were about equally divided on the subject, and those who did not return the supers to the hives held that the honey kept just as well in that condition as if it was gathered up by the bees. Perhaps there is a difference owing to the climate. In the Mishaps there is a difference owing to the climate. In the mississippi Valley we have very changeable temperature, and even late in the fall we may have weather favorable to the development of fermentation. Besides, during our damp weather the honey that is spread over the surface of those combs becomes watery, and much more liable to the effect of fermentation garms. of fermentation germs.

To remedy the trouble mentioned, I would recommend that you extract your honey after the first frost, and if the colony is strong, separate the brood-chamber from the upper story, as mentioned above. I would not under any consideration follow the methods of some apiarists, who put the combs out in the open air for the bees to clean. It teaches the bees to rob, and when the combs are not where all the bees can get at them, they tear them up mercilessly in their haste to get the honey away. Robbing bees are as unreasonable and merciless as human robbers.

If the extracting is done too late, and the bees have no warm weather to enable them to occupy the supers suffi-ciently, the conditions will be still more unfavorable. In this locality we are successful in getting our combs all nicely cleaned before cold weather, if the extracting is done early in October, and the supers returned the same evening. Usually within two days all will be in order. Yet we do not remove the supers until November, because we have once or twice noticed some moth-growth in combs that were too early taken away from the bees. If the combs are kept in a cold room—that is, a room without fire from November till May—there will be no moth in them. The cold weather evidently destroys the moth in whatever stage they may be.

A CROP-REPORT ERROR-TIME TO STOP.

A clerical error crept in my article on page 518. I reported a crop of 200 pounds per colony, and either the typewriter or the typesetter made it out 300 pounds. The crop was large enough with the true figures, and I only wish we could have such crops a little oftener.

In his three-column reply to me, Mr. Arthur C. Miller ac-cuses me of resorting to "sophistry." When in an argument one of the contestants advances unpleasant epithets against his adversary, it is time to stop. Honey too much diluted changes to vinegar. Hancock Co., Ill.

#### Handling the Larvae and Royal Jelly in the Doolittle Method of Rearing Queens.

M ANY of the readers of this journal undoubtedly remember the fierce queen-rearing battle which trails ber the fierce queen-rearing battle which took place in these columns between the queen-breeders and some of the contributors in general, and many and heavy were the shots fired from either direction, and some very impor-tant questions were settled for ever, if I am not mistaken.

But "not by a long shot" do I believe the queen-rearing question entirely settled. The umbilical-cord theory was pronounced nonsense, proved to be such, and disposed of. But there are other questions still unsettled, and it is for that reason I venture to take up the matter anew in these columns, if the editor permits me to do so, and I believe he will, for he himself is of the opinion that the queen-bee is is the "main spoke in the wheel," or, in other words, the foundation of a colony of bees.

Mr. Alley says, in part, let us have a quiet discussion on queen-rearing. All right, Mr. Alley, here we go! I believe it is now accepted in general that naturally-

reared queens are the best ones obtainable, but are believed to be too expensive, and the supply so inadequate to the demand, and consequently artificial means have been resorted

Now, there are two principal artificial queen-rearing methods before the bee-keeping public, viz.:—the Doolittle

and the Alley. Not knowing very much about the Alley method, I shall confine my discussion principally to the Doolittle plan now.

The practitioners of the Doolittle method know it is necessary to dip royal jelly from one queen-cell to another, also to transfer the larvæ for the queens. And also knowing that some of the so-reared queens, or a good many of them, do not come up to the standard or expectations, I believe I found the cause of this short-coming the past season.

Last summer, in June (I do not exactly remember the date, but it matters not), I took some queen-cells and a piece of comb with larvæ into the house, as the day was rather cool, and it being noontime there was a good fire in the kitchen. I thought I would rather transfer the larvæ and fix all up there, for the temperature was high, at least 95 degrees F. I put the piece of brood to be used into my clothes, next to my body, to keep it warm, but the queencells containing the royal jelly I was not so careful with, but cut them out and carried them in my hands to the house, laid them on the table, and went to work at once dividing laid them on the table, and went to work at once dividing the jelly, and putting a portion into each respective cell-cup, a la Doolittle; when, after I was done with the job, I took the piece of comb containing the larvæ, that I had kept in my clothing until then, shaved the cells down as directed by Mr. Doolittle, picked up the spoon I had used in transferring the jelly (which I had made expressly for the purpose out of hard maple, one end of which I had made into a curved toothpick, for picking the lavæ out of the bottom of the cells), when, for some reason I do not know, I touched my lips with the spoon I had previously used for transferring the jelly, and which was yet wet therefrom-why, it felt as cold as ice!

At once it dawned upon me why some of the queens reared by this method are inferior, for, if the temperature of the jelly sinks below that of the atmosphere surrounding it, which it surely does, it is no wonder that some of the little larvæ produce poor queens after receiving such a "cold bath" as they would have had in this case had I not discovered the rapid cooling off of the jelly. But mind, it takes a lot of heating in order to raise the temperature of the jelly in the wax-cups to a normal one again. And, therefore, I would caution the beginner to be very careful, if using the method in question, lest he have some poor queens, although it may be a success in the hands of an expert.

, for one, am in favor of having the queen put the eggs for the queens in the cell-cups herself, without my touching them at all, as the experience I had last summer proves it is a very dangerous thing to do. It seems to me something like taking a half-hatched chicken out of its shell, holding it in my hand awhile, and then putting it back again and closing up the egg and allowing the chick to hatch. I wonder if it would be as strong as if I had never taken it out! I hear some one say, "Oh, well, a queen-larva is no chicken." I know it is not, but both are alike in some respects, at least, and that is in this: They both require the natural course for development, and experiments made show that the temperature of a colony of bees varies but little, however extreme the atmosphere surrounding it may be consequently, it seems to me that a larva of such tenderage can scarcely stand the radical change of temperature to which it is subjected to in the transferring process. seems possible that by making some improvements and short cuts a much larger percentage of queens can be reared under the swarming impluse than has been done heretofore.

Some of the readers of the American Bee Journal un-doubtedly remember me telling about cutting a brood-comb about half way through the middle and placing the same in a colony preparing to swarm, for the purpose of getting queen-cells built on the lower edge of the comb. Last summer I tried cutting only about two inches off the bottom of the comb, and inserted a stick with dipped cups, a la Doo-little, except dipping the entire stick into melted wax, and found the queens to lay promptly in them. But I believe if one would go to the trouble and take away the brood-combs from a colony intending to swarm, and insert several—say three or four combs with queen-cell cups—the queen would lay in them in such rapid succession that nearly all of them would hatch at the same time.

Now, in order that I may not use too much space, I will close and let the other folks have their say.

Chippewa Co., Wis.

Queenie Jeanette is the title of a pretty song in sheet music size, written by J. C. Wallenmeyer, a musical bee-keeper. The regular price is 40 cents, but to close out the copies we have left, we will mail them at 20 cents each, as long as they last.

## Our Bee-Keeping Sisters

Conducted by EMMA M. WILSON, Marengo, Ill.

#### Queen-Rearing—Feeding Bees—Other Questions

I launched my canoe into queen-rearing recently, and was utterly smashed on submarine snags not yet discovered.

Help! help!
I have a "select-tested" queen from a well-known breeder, and her bees are a beautiful yellow, but so small (not more than three-fourths as large as my big, brown bees) that I hesitated to rear queens from her; but I tried, any-

I used two Danzenbaker hive-bodies with excluder between, the lower one containing the queen and her brood, the upper one 10 frames of brood from other colonies. I let this stand eight days, then removed the queen and all frames from below, but left almost all the bees. I put 3 frames of young brood and eggs from an Italian queen in the center of the upper story, putting below frames taken from there.

Ten days from removal of queen, just as I was about to go around and break up this colony into nuclei (after spendgo around and break up this colony into indeed (access), this ing about a week sawing and nailing on nucleus hives), this colony swarmed. This was Aug. 24. On examining the 3 frames given, I found about 12 or 15 little sealed cells, the most insignificant I have ever seen, some indeed barely larger than drone-cells, varying to about an inch in length, and about the size of a lead-pencil around, not one of which I'd think of using. Now, several frames distant, in the same story, there were two splendid cells, out of which queens evidently had emerged. I put those on frames of brood from a black queen given over the excluder eight days before removal of queen.

So endeth effort No. 1. The following is trial No. 2: I removed the Italian queen and shook nearly all bees from an upper story (which was the one containing brood) of another colony into the hive out of which she came, and the next day I shook nearly all the bees from another strong colony into this hive, for I did not feel sure I had enough young bees (of course, the queens were temporarily removed while shaking was in progress). Although goldenrod was still in bloom, on the third day I fed about three-fourths of a quart of extracted honey because the weather turned cool and cloudy, and con-

tinued so for several days.

Now, on the day for forming nuclei, on looking in the hive, I found the same kind of tiny little cells as before. Failure again!

Now for questions: 1. In my first attempt, do you think those bees started out with the idea of superseding their queen, and afterwards found themselves crowded, and decided to swarm?

2. What is the reason the bees would not make larger cells? Do you think the queen, whose bees are so small, is at fault, or have I simply "bungled?" (Don't hesitate to say so—it is not the first time.)

3. Is extracted honey fed without thinning?

4. Why must feeding be done early? Can't the bees ripen honey if the weather is such that they can fly? In this locality there are not many weeks, or even days, in which they can not fly.

5. In wintering out-doors, would entrance-blocks be any My hives have an inch across the entire front. advantage?

6. Last fall I stupidly left a super containing 10 sections of drawn comb on a hive during fruit-bloom; these sections were filled (no other hive had supers then). Now, next spring, if I add supers underneath each colony would the bees store in them if there is any surplus? (Fruit blooms in March and April, and I don't care to disturb sealed covers.) Would it interfere in any way with brood-rearing?

7. Why should hives be exactly level if frames are not

loose-hanging?

8. If brood in the same comb hatch into both yellow and dark bees, does it indicate the queen has been impurely mated?

9. Does not hanging out frames for bees to rob cause

robbing when not desired?

10. Where does Miss Wilson get her buckskin gloves? and at what price?

I want to hear from the sister about those asbestos gloves, too. MRS. C. D. MEARS.

Princess Anne Co., Va.

Answers .- 1. Those bees, no doubt, thought themselves an uncommon thing for bees to start cells. You should have examined the frames and killed all cells at the time you gave the brood from which you wished your queens reared.

2. Now about those small cells, they may, or may not, have been worthless. When queen-cells are started, not on the edge but in the center of the comb, they appear much smaller, often being so flat to the comb as almost to escape detection, and yet good queens may emerge from those same

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3. Not usually.
4. In Virginia it does not make so much difference as farther north, still it would be better to feed when the

weather north, still it would be better to feed when the weather was warmer than just warm enough for bees to fly.

5. It is possible that a smaller opening might be better.

6. They would not be as likely to store in them as if they were placed over the brood-nest. But it would do no harm to try, unless it might be to soil your sections. It would not interfere with brood-rearing.

7. The hive should be level from side to side, not necessity from front to rear.

sarily from front to rear. If not level from side to side the combs will not be built in the center of the frames, and there will be the same trouble in the sections.

8. Either there is impure blood in the queen or she has

been impurely mated.

9. It may, if care is not used.

10. I got them at one of our stores in Marengo, but have never been able to get another pair like them. I paid \$1.00 for them.

I, too, am anxious to hear more about those asbestos gloves.

## Hasty's Afterthoughts

The "Old Reliable" seen through New and Unreliable Glasses. By E. E. HASTY, Sta. B Rural, Toledo, Ohio.

OUEEN COMPELLED TO CEASE LAYING.

In the case of a queen compelled to cease laying, and the question whether there is any such compulsion—with its presumptive harms—the probabilities rather look on your side, dear Boss. Page 547.

GLYCERINE CANDY FOR QUEENS.

Had I turned my guessing machine betimes on J. P. Moore's glycerine candy for queens, I should have guessed that it would poison every mother's daughter of them. Nevertheless, success is a very successful article; and after his experience I'll only demand a little verification. Don't go it too strong till others also have found glycerine harmless. Page 547.

CELL-CUTTING TO CONTROL SWARMING.

My Afterthink on the plan of controlling swarming by persistent cell-cutting, is that sometimes it would be quite satisfactory, and sometimes quite unsatisfactory. But hunting cells in overcrowded hives is not pleasant work; and the amount of time required at it will, I think, cause the operator to quit it after a bit, wherever the number of hives involved is more than a dozen. Meekly ready to be informed and corrected by the man who has run 50 colonies through the season that way. Page 547.

1000 POUNDS TO ONE COLONY-PROVE IT !

And now, behold, so reputable a boy as E. S. Lovesy throws his hat into the charmed record ring of 1000 pounds to one colony! I believe a running-at-large impression afflicts a good many of us that 1000 pounds per colony has never been properly proved up yet. Page 548.

TWO DIFFERENT APIARIES

We will agree with Mr. Wilmon Newell, of the Texas experimental apiary, that running a private apiary for gain and running a public apiary for information are two very different propositions. Page 548. SHOWER-BATHING A QUEEN BEFORE INTRODUCING.

So it is for the purpose of catching the queen that Adrian Getaz wets her down. Shower-bath. Is it not true that man—bee-keeping man—has "sought out many inventions?" It makes two operations in place of one in catching a queen, and some of us would manage to bungle both of them—douse the water in such a way as to knock to unforeseen regions a bunch of bees, queen and all. Especially the wide-awake queen dodging back and forth around a bottom corner of the frame is likely to be a difficult subject for water-bath. Still, with all the rebates, the resource looks like a simple and useful one for some hands to use. Worth some trial from us all, perhaps. Page 550.

He didn't know enough to take to the tall timber when the bees chased him home, and the "sister" came and cap-tured him the second time for hiving purposes. For particulars, see page 551.

BEES, UNLIKE DOCTORS, KILL THEIR PATIENTS SOONER.

That colony, page 553, which kills about a pint of its own bees every once in a while, I'll guess it is to cure some disease—paralysis, perhaps. The bee's infallible remedy for disease is to kill the patient and lug him out. Often, I think, they fail to live entirely up to their doctrine; but that is the ideal. Human doctors wouldn't like it-makes the case too short for an exemplary fee.

INTRODUCING WETTED QUEENS IN FRANCE.

So wetting the queen when introducing her is well be-spoken by an apiarist over in France. Whatever of hostility the queen brings upon herself by impudent conduct, will evidently be obviated (or, at least, postponed) by a good wetting. I have oft suspected that the queen was to blame herself in very many cases. Page 557.

CARBOLIC ACID AS AN APIFUGE.

"Powerful strong" an apifuge must be to drive the bees out of a super in a few minutes merely by the vapor from a wet rag, and no forced current of air. As it is no more surprising than some other things that are told of car-bolic acid, we must not assume that it will not work until we have seen it tried. Page 557.

TESTS FOR PREVENTION OF GRANULATION.

I feel quite interested in the Texas experiment of bottling honey at different temperatures. 150 degrees to 180 derees, in comparison with a bottle neither heated nor sealed. But it will take three years to gather all the fruits. Already some fruit—the unheated granulated in less than three months while none of the other samples did so. The first examination at six months is past, and the two judges report the 150-degree sample much better than the high temperatures, and perceptibly better than those next to it. The 180 degrees was called quite objectionable. I should not have expected so pronounced results. Wonder if "perceptional countries are also provided in the perception of the perc sonal equation," as the astronomers say, didn't have something to do with it. I would suggest that next time they capture some assistant judges who shall not be allowed to know "tother from which" as to the samples. Page 564.

## Dr. Miller's Answers

Send Questions either to the office of the American Bee Journal, or to Dr. C. C. Miller, Marengo, Ili.

#### Wintering Bees-Moving Bees in Summer.

1. I have I colony that I captured while swarming July 10. They are in a 10-frame box-hive, and are working early and late, having 6 frames full of something. What are my first and last duties to have these bees in working order for the next spring? I have the super with starters for the hive, but they are not on the hive.

2. Prof. Cook speaks about not allowing bees to breed after Septembers How do you prevent this?

tember. How do you prevent this?

3. During the busy season are all the bees supposed to be in the hive at night? If so, why would it not be safe to move a hive? MISSOURI.

Answers.—1. Perhaps your first duty is to see that there is no lack of stores for winter, for if only six frames have been filled there

may be a question as to winter supplies. Your next, and perhaps your last duty, is to study up carefully your bee-book, and then try to put in practice its teachings.

2. The matter is not much under your control, except that you should do nothing to encourage brood-rearing. If any feeding is necessary, let it be done rapidly, for slow daily feeding after the manner of a natural honey-flow has some tendency to start breeding.

3. With rare exceptions, like all virtuous maidens, worker-bees are expected to spend their nights at home. But that has nothing to do with the question of moving, for if you move them a short distance at night all the field-force will return to the old spot the very first time they return from the fields.

#### Cork-Cobs for Smoker-Fuel.

I often see fuel for smokers mentioned, but never my favorite. Did you ever try it, corn-cobs broken up with a hammer? Try soft, pithy ones first. After a few trials you can select your fuel and break fine or coarse to suit your purpose.

Pennsylvania.

Answer.—Yes, indeed; among the many things I have tried for smoker-fuel I have used quite a few corn-cobs. The matter of smoker-fuel is largely one of convenience. For some time the most convenient thing for me has been dry chips from the chip-pile, gathered on dry days and kept under shelter. It isn't at all certain, however, that something else may not take their place next year. The chips need no preparation, and make an excellent smoke.

#### Position of the Winter Stores.

I am a beginner in bee-keeping. This is my first experience and season. I have 3 colonies in 8-frame chaff-hives, with shallow extracting-frames on them. The bees have the supers quite well filled, but very little in the brood-body. Will they carry it down before cold weather, or will they winter in the super where the honey is?

Don't the bees have to have their winter stores in their brood-nest to winter without loss? Is it best for me to get the honey down in the brood-nest? If so, how shall I proceed to do it?

I have looked all over my text-books and bee-papers, but so far I have been unable to find the information I want.

have been unable to find the information I want.

I want to winter the bees out-doors, and as they have little in the brood-nest, and honey above, it worries me as to whether they will winter this way.

MICHIGAN.

Answer.—The bees must winter where their stores are, and the great probability is that they will have stores all right in the broodcombs. It is quite possible that the bees have more in the broodcombs than you suppose, if you have not looked at them very lately, for when brood-rearing begins to cease all they gather will go into the brood-chamber. If vacant cells are still left below, the bees will carry down honey from the super. It occasionally happens that the colony may settle in the super for their winter quarters, but that is not likely to happen. to happen.

#### The Use of Formaldehyde.

I read the interesting article by R. L. Taylor, on page 502; also another article by G. W. Haines, page 536, in Gleanings in Bee-Culture, on formaldehyde for curing black brood. Now, I would ask:

1. Can full, capped extracting combs be disinfected by the process of closing them up in an air-tight box or cupboard and fumigating them with formaldehyde?

2. Foundation also when it glyss suspicion of being infected.

Foundation also, when it gives suspicion of being infected, may it be disinfected then?
 What do the bee-keepers in America think of formaldehyde as

a cure for black brood?

4. I think by this time there may have been invented a machine by which formaldehyde is made directly by metilic alcohol (in Italian alcohol metilico.)

Answers.—1. I wish I might say to our good friend in Italy that there is do doubt as to the efficacy of formaldehyde. Tests have been made, seeming to show that formaldehyde fumes utterly destroy foul-brood spores in honey fully capped; yet a few have reported adversely. At present we do not really know yet whether to depend upon the drug or not in case of fully sealed combs.

2. There is probably little doubt as to success with foundation.

3. It is prophably just as reliable with black brood as with foul

3. It is probably just as reliable with black brood as with foul

broad

That may be in the future. Possibly in Italy you may get ahead of us.

#### Bees for Non-Swarming.

In your book, "Forty Years Among the Bees," you say that you work toward a non-swarming strain of bees. Why do you say nothing about black bees? The blacks are less inclined to swarm than Italians.

SWITZERLAND.

Answer.—The above comes from an esteemed German bee-keeper across the water, and it is quite possible that if I lived in Germany or Switzerland, I might pay close attention to black bees. There are good bee-keepers there who say the Italians are not so good as the natives, and I have wondered no little why there should be such a difference of opinion in the two countries. Is it possible that you have a better strain of blacks than we have in this country, or does

the climate make the difference? Answering your question directly, I may say that in this country the Italians are so superior to the blacks as honey-gatherers, that even if the Italians should be more inclined to swarming (I wish we had a single word in our language to express that, like the German word schwarmlustig), I should still prefer the Italians on account of their superiority in other respects.

#### Loss of Queens in Introducing.

I have tried to introduce an Italian queen in one of my colonies, which they did not accept. I found the queen a day later in front of the hive dead, so I thought I would try again, and bought two more queens. I tried the second one; I left her in the cage three days, and then took off the pasteboard and let them eat out the candy, which took another 24 hours. I looked in 4 days afterwards, and there I found the dead queen in front of the hive, and also the third one the same way. What is the reason they do not accept the queens, as I had destoyed all the queen-cells? Will it be time enough yet for them to rear a queen if I put in a frame of brood, and they have no drones in the hives? or will they rear their own queen? PENNSYLVANIA.

Answer.—It's hard to tell just what the trouble was. In almost any plan of introducing there will sometimes be failures; one case failing where a number succeed, and you can't tell that you've done a thing different in the one case—it just seems like pure contrariness on the part of the bees. Probably the best thing is to unite the bees with

## Preparing Bees for Winter-Using the Bingham Honey-Knife,

1. I have 54 colonies of bees, and want to prepare them for winter. The hives have plain board covers, and some are old and may leak when the rainy season sets in. Would you advise me to put ducking under the cover to keep out the rain and cold? If so, what weight should I get and would it be advisable to give it a coat of oil to make

it waterproof?

2. Is there anything else I could use that would be better than ducking? You understand, I wish to keep the expense down as low

as possible.

3. Would it hurt the bees if they should get wet, on account of

the cover leaking?

4. In using the Bingham uncapping-knife, is it proper to use the beveled side or the smooth side of the blade next to the comb? I have seen it used both ways. CALIFORNIA.

Answers.—1. Don't do it; if the rain gets through the cover it will not help to have something inside to hold the moisture.

2. The cover of a hive is a poor place to economize. But the thing to do is not to have something inside, but outside the leaky cover. Perhaps shingles, shooks, or cheap boards.

cover. Perhaps shingles, shooks, or cheap boards.

3. Yes, indeed.

4. I don't know. I wish several would tell us their preference, or whether they use both ways. [Perhaps Mr. Bingham will give the right way to use his knife. We used the bevel edge on the comb.—Editor.]

#### Honey-Plants for Louisiana-Red Clover Queens.

1. What is the best honey-plant that will grow in Louisiana?
2. When planted and how cultivated on high land?
3. Will California sage and catnip grow on Louisiana high lands?
4. By introducing red clover queens now in colonies that will work up to November 15, 1903 (as it never gets cold here before that time of the year), when will the queens begin laying, and when can I expect swarming from the same colonies?
5. Is cotton and Lespedesia (a species of clover) honey-plants of any consequence? There are miles of it around here.

-1 and 2. I don't know, and hopefully refer the ques-ANSWERS. tion to some of our Louisiana friends.
3. I must also refer this question, venturing the guess that catnip

would succeed, but not the wild sages.

4. If introduced at any time before colonies in general cease brood-rearing, you may expect her to begin laying within a week of introduction; and you may expect swarming next season at the usual time for other colonies to swarm. If it be your object to have the colony swarm as early as possible, you can hasten matters by exchanging compact the production of the pro ing combs of brood with other colonies, swapping sealed for unsealed brood.

5. Again I must refer this question. You can decide the question yourself by a little watching when the plants are in bloom.

#### A Beginner's Questions.

I wish information on some points that I do not find in the books. What stock of bees is the one I enclose you? I have one large colony of these.

2. What is the average life of a colony, or the worker-bee?
3. When the bees are quieted with cold is it all right to lift frames out to examine for the queen?

What make of hives is the best for a beginner to have?

5. Is it not best to have the hives set up on legs about 6 inches high, and to keep the legs saturated with kerosene so as to keep away

the moths, mice, ants, etc.? I have had my hive that way ever since the first of July, and cannot find a single pest in the hive.

9. For winter quarters would it be all right to put a dry-goods box over the hive, with a small opening?

The two bees I enclose you were dragged out of the hive and the ground.

dropped on the ground. MISSOURI.

Answers.—1. It is not easy to identify specimens mashed in the mail, but I think they are what are called hybrid-Italians, a cross between Italians and blacks.

2. I don't know what the average life of a colony is. Badly managed it may not live a year; rightly managed it is a permanent insti-

tution. The life of a worker-bee averages something like six weeks in the busy season; during the idle time of the year several months.

3. No, don't disturb a colony if you can help it, unless it is warm

enough for bees to fly.

4. The same make that he'll continue to use after he gets over being a beginner. Perhaps there's nothing better than the dovetailed, but tastes and opinions differ.

5. In some places that is worth while on account of ants; it wouldn't be worth while here. Legs don't keep moths out; hardly



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2d.—To protect and defend its members in their lawful rights.
3d.—To enforce laws against the adulteration

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If more convenient, Dues may be sent to the Secretary, at the office of the American Bee Journal.

#### FROM MANY FIELDS

#### Onion for Bee-Stings.

Mr. Hasty, page 584, "Can't swallow ne onion." Perhaps if he would try a the onion. few doses he might not be so "hasty" to condemn it. I am confident that a raw onion sliced and rubbed freely on the sting has saved me the discomfort of a badly swollen face. If bee-stings do not swell on you, try it on some one where they do.

WM. R. MARTIN.

Washington Co., Pa.

#### An Aster-Hive Preferences.

I enclose a flower upon which the bees are working with great energy. Will you kindly give its name?

While we have a great abundance of golden-rod bloom I never see the bees or any honey-gathering insects work-ing upon it; neither does heartsease yield honey in this locality.

I have the book "Forty Years Among the Bees," and have enjoyed it very much, and have been very much prof-

ited by its contents.

I winter my bees out-of-doors, using the Danzenbaker hives. I think our preferences for hives rests upon the same foundation as a mother's affection for her children—her own babies are always the best. This preference for "our own" seems very deeply embedded in Nature.

W. P. HOGARTY.

Wyandotte Co., Kans., Sept. 28.

[The plant referred to is an aster. The aster season includes September, October, and November, and during this period many varieties of this rather abundant and wide-spread honey-producing plant are in bloom. In many localities the entire winter supply is obtained from the asters and allied plants of the Composite family. -C. L. WALTON.]

#### Bee-Keeping in Arizona.

So far the honey crop is about the average; I have about 70 pounds per colony, but the bees are still storing from sunflower and alfalfa, and a kind of willow that grows along the river and irrigating ditches.

Sept. 10, we had a pleasant call from Mr. A. I. Root, who was on his way home from the Los Angeles convenvention, which call was very much appreciated by us bee-keepers; only he did not stay long enough to see all the bee-keepers of the Valley. I was just finishing up the third extracting the day he came, and he seemed surprised because I was extracting so late, but

#### CONVENTION NOTICES.

Illinois.—The annual meeting of the Northern Illinois Bec-Keepers' Association will be held in the Court Honse, in Rockford, Ill., Tuesday and Wednesday, Oct. 20 and 21, 1903. A good program is being prepared, and all interested in bees are invited to attend.

Cherry Valley, Ill. B. Kennedy, Sec.

Connecticut.—The Connecticut Bee-Keepers' Association will hold their fall meeting in the Capitol at Hartford, on Nov. 4. All bee-keepers are cordially invited to attend. For full information, write the Secretary.

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those same bees are ready to extract again. We have had a fine fall so far, and if it will only stay warm we will get considerable honey yet. We have run about 436 colonies for extracted honey this season, and 183 for comb was have had the comb-honey honey. We have had the comb-honey bees in two apiaries, and the ones for extracted honey in four different yards.

Early in March we moved 180 colonies about 10 miles to a heavy mesquite timber, and they gathered about 700 gallons of nice honey from that source. The mesquite commences to bloom about June 20, and lasts until July 15. Then we moved the bees back to the Valley, and have had two good extract-ings from them, and will get one more ings from them, and will get one more extracting, which, I think, has paid us very well for our work, as that honey comes much earlier than the honey from alfalfa in the Valley. We got our extra extractings out of those we moved, and would have had a great deal more honey if it had not been for deal more honey if it had not been for paralysis, which affected 81 colonies quite badly, and they did not gather very much honey from the mesquite. I have the bees now in apparently healthy condition, but of course it may return in the spring; if it does not, I will report my treatment.

W. D. JEFFERSON. Graham Co., Ariz., Sept. 26.

#### Beedom Boiled Down

#### Honey for Rheumatism.

It is said that a certain lord found so much benefit from the use of the following mixture for rheumatism that he paid his physician £300 for the privilege of making it generally known,

privilege of making it governs pro bono publico:

Recipe:—Sulphur, 1 oz.; cream of tartar, 1 oz.; rhubarb, ½ oz.; gum guiacum, 1 drachm; honey, 16 oz. A tablespoonful night and morning in a tablesful of white wine and hot tumblerful of white wine and hot

This mixture is called "Chelsea Pensioner,' and a man of my acquaintance having tried the same has been benefited .--JOHN BROWNING, in British Bee Journal.

#### Be Careful With Horses Around Bees.

Below is given a graphic account of the trouble one of our Canadian friends had through trying to make a combination of bees and horses. It will serve a good purpose if it warns some one of little experience in that line, so that he may avoid a like disaster. Some of us are looking forward hopefully to the time when we can have "horses" immune to bee-stings-in other words, when automobiles shall become so common and reduced in price that they will be cheaper than horses.

BEES AND HORSES-A BAD COMBINA-TION AT TOO CLOSE QUARTERS.

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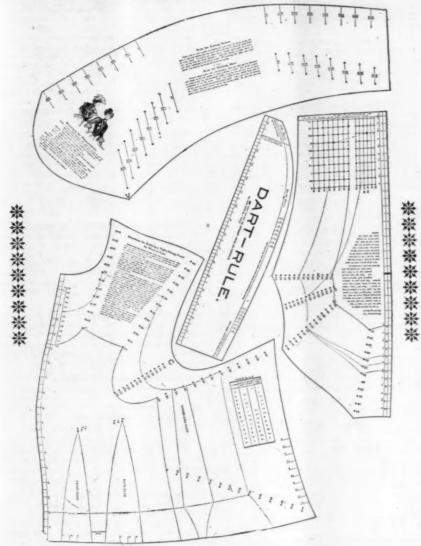
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daughter so taught will not only make a better wife and mother, but will also be more likely to secure a better husband, and will always command his respect. He will not look upon her as a helpless "know-nothing," but will know that if he fails in his duties, she can live without him, and this can only strengthen the bond between them. A thorough knowledge of dress-making can always be turned into gold, and become the means of support for the mother and her little ones. She may never have to use this knowledge in this way, but she has a trade and can use it if necessary. can use it if necessary.

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the time on buckwheat just west of the yard. Through over confidence, the men in charge of the horses (a spirited team) were told to drive right up against the apiary where the bees were flying by the thousands against a strong wind. A few bees at once at-tacked the horses which could not be induced to move, one throwing itself in the harness. The bees then literally poured out on the horses by the thou-sands, and the men, after vainly trying to get the horses to go, and after receiving a lot of stings, concluded that "'twas better to fight and run away, and live to fight another day," so accordingly took "leg bail" on double-quick time.

Being only a short distance away at the time, and hearing the noise, the writer arrived on the scene of action bare-headed and in his shirt-sleeves. Needless to say he met with a very warm reception. After with great difficulty unhitching the horses by the assistance of a brother, who had now arrived, and by the free use of the whip induced them to leave the place slowly, covered with swarms of angry bees.

The poor brutes were literally stung over every inch of their bodies, and it was thought that they would certainly die. Salt was given to them as soon as possible, but owing to the way they kicked and plunged after being put in the stable, hardly anything could be done by the way of removing the stings. However, they have pulled through, and to-day (a week after the stinging) they appear to be improving nicely, although their bodies are cov-ered with lumps full of pus which are now discharging. While the writer re-ceived hundreds of stings on the head, face and neck, aside from a severe pain

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in the head for about an hour, no serious effects were felt. To be sure, there was a little puffering about the face, but not nearly as much as I have often seen from the effects of a single sting.

I merely relate this as a warning to others to use judgment when it is necessary to bring horses near a large apiary, as no one who has never witnessed the blind, impotent fury of bees when angered in this way, can form any idea of their vindictiveness in such cases.—York County Bee-Keeper, in Canadian Bee Journal.

#### Formaldehyde.

The most suitable time for fumigating combs with formaldehyde is when foul brood is in growth, i. e., in the spore stage. My practice is to fume all combs removed from colonies before returning.

In using formaldehyde for fuming care should be taken to have no brood in the combs, as it kills the brood, even when capped; and this brood has to be removed by the bees, which wastes a lot of time. I first remove all cappings, and if the comb contains two or three pounds of honey, I extract this. It is quite evident that I read Mr. Saunders' first letter (5212, page 336) on the same wrongly, owing to his not mentioning that he aired the combs, consequently I thought he had not done so. In reply to his letter (5225, page 354), if he will mix a little formaldehyde with twice its volume of water, and evaporate in a test tube—smelling the gas as it is evolved—it will be found that when heating the tube after the liquid has evaporated a

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very powerful gas is still evolved. There is also a sediment which nearly il evaporates on further heating. The same thing takes place with formaldeyde without water, only the residuum left is black. I am quite aware that formaldehyde attacks iron and steel, out only to a limited extent, and when a layer of oxide is formed on the surface of the metal it ceases to attack the metal, owing to the oxide protecting the metal. With regard to the addition of water causing the gas to polymerise, that will not injure its properties as a disinfectant, even if it did so. Acetic acid and lactic acid are polymers, and water is added to these, but does not alter their uses, and so with formalde-hyde. Mr. Saunders asks, "Have I fumed combs with diseased brood, pollen, and heavy stores, and given them back to the bees without a return of the disease?" Yes, I have done so. That is, I have so fumed combs, and have not so far seen any return of disease.

I have only been experimenting with formaldehyde last year and this, con-sequently I am not in a position to give any definite information as to results this autumn, but hope to do so some time next year.-BLACKWOOD, in British Bee Journal.

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#### HONEY AND BEESWAX

MARKET QUOTATIONS

Chicago, Oct. 7.—The volume of sales are larger than at this time last year, and the supply more than corresponds with sales; but the prices and good quality of honey are expected to make a larger demand than we have had for several years. No. I to fancy sells at 13@14c, with practically no sale for off grades, which are quoted at 10@12c. Extracted, white, 6@7c; amber, 5@6c, according to quality and kind of package. Beeswax, 28@30c.

R. A. BURNETT & Co.

Boston, Oct. 8.—Comb honey continues to be in good demand. Fancy white honey in cartons we quote at 18c; No. 1, at 16c; glass-front cases fancy white at 16c; No. 2, at 14c. Extracted honey, Florida. 6½67%c, according to quality. Blake, Scott & Lee.

CINCINNATI, Oct 7.—The demand for honey is a little better. The prices rule about the same. Extracted is sold as follows: Amber, in barrels, from 5@5%c; in caus it brings about half cent more; water-white alfalfa sells from 6@6%c; white clover, from 6%@7%c. The comb honey market is quite lively and same is sold: Fancy water-white from 14%@15%c. Beeswax, good demand at 30c. C. H. W. Weber.

ALBANY, N.Y., Oct. 8—Honey market firm for comb at good prices. We quote: Fancy white, 16c; A No. 1, 15c; No. 1, 14½@15c; dark or buckwheat, 13½@14c. Extracted seems to be more plenty throughout our correspondence than comb. We quote: White, 7@7½c; mixed, 7½@7c; dark, 6@6½c. Beeswax, 23@30c.

H. R. WRIGHT. H. R. WRIGHT.

KANSAS CITY, Oct. 6.—The demand for comb and extracted honey is good. We quote: Fancy white comb, 24 sections, per case. \$3.00; No. 1, \$2.90; No.2, and amber, \$2.75. Extracted, white, per pound, 7c; amber, \$5.606c. Beeswax, 25@30c. C. C. CLEMONS & CO.

CINCINNATI, Oct. 1.—Comb and extracted honey are coming in freely, and the demand is good with steady prices. We are making sales at the following prices: Amber extracted at 54/66/c: white clover, 6/69/c. Faucy comb honey, 15c. Beeswax, 30c.

The Fred W. Muth Co.

New York, Sept. 23.—Comb honey is arriving quite freely now, and is finding ready sale at 15 cents per pound for fancy white, 13@14c for No. 1 white, and 12c for No. 2 white and amber. Very little buckwheat on the market as yet, and prices are hardly established.

Extracted honey is ruling about the same as last with plenty of offerings of all grades.

Beeswax is somewhat declining and selling at present at from 28@29c per pound.

HILDRETH & SEGELKEN.

San Francisco, Sept. 30.—White comb. 1-lb. frames, 13@14 cents; amber, 9@11c. Extracted, white, 64/6—; light amber, 55/66c; amber, 58/5/c; dark amber, 41/64/6c. Beeswax, good to choice, light, 27/66/20c; dark, 25/62/0c.

There have been moderate r'ceipis, mostly representing prior arrival purchases. The market continues to present a firm tone, but is not particularly active, buyers not caring to stock up very heavily at extreme carrent rates, and finding it exceedingly difficult to obtain noteworthy concessions in their favor.

WANTED! FANCY HONEY
In no-drip shipping-cases. Also Amber Ex-

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WANTED—Comb Honey in quantity lots. We are perhaps the only dealers in this article owning as much as 150,000 pounds at one time. Please state quantity, quality and price asked for your offerings, Thos. C. Stanley & Son, 24Atf Manzanola, Colo., or Fairfield, Ill.

WANTED-Extracted Honey.

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O. H. W. WEBER, 2146-48 Central Ave., CINCINNATI, OHIO. tf Please mention the Bee Journal.

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South as well as North.

How Moore's strain of Italians roll in the honey down in Texas.

honey down in Texas.

Hutto, Tex., Nov. 19, 1902.

J. P. Moore.—Dear Sir:—I wish to write you in regard to queens purchased of you. I could have written sooner, but I wanted to test them thoroughly and see if they had those remarkable qualities of a three-banded Italian bee. I must confess to you I am more surprised every day as I watch them. They simply "roll the honey in." It seems that they get honey where others are idde or trying to rob; and for gentleness of handling, I have never seen the like. Friend E. R. Root was right when he said your bees have the longest tongues; for they get honey where others fail. I will express my thanks for such queens. I am more than pleased. I will stock my out-apiarles next spring with your queens.

Yours truly, Henry Schmidt.

The above is pretty strong evidence that red

The above is pretty strong evidence that red clover is not the only plant which requires long-tongue bees to secure the greatest quantity of nectar.

of nectar.

Daughters of my 23-100 breeder, the prizewinner, and other choice breeders: Untested,
75 cents each; six, \$4.00; dozen, \$7.50. Select
untested, \$1.00 each; six, \$5.00; dozen, \$9.00.
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the close of the season.

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## Root's Goods in Chicago.

The business for many years conducted by George W. York & Co., at 144 E. Erie St., as agent for The A. I. Root Company's Supplies, is this day transferred to The A. I. Root Company, to be conducted as a Branch Office. All outstanding accounts will be paid George W. York

The policy of Branch House will not be changed. We shall continue to serve the interests of bee-keepers to the best of our ability, and to increase our facilities whenever possible for such service. Mr. York will still be in the same office with us, and the benefit of his years of experience with this trade will thus be available.

Please note change of name to avoid confusion in our work.

Oct. 1, 1903.

#### THE A. I. ROOT COMPANY.

All orders, remittances, inquiries, etc., should be addressed to The A. I. Root Company, 144 E. Erie St., instead of George W. York & Co.

#### STATEMENT BY GEORGE W. YORK & CO.

TO OUR CUSTOMERS AND FRIENDS:

In transferring back to The A. I. Root Company the bee-supply business which we took over from them some years ago, we do so with regret, as we have labored to build up a large and honorable trade in bee-appliances, and value beyond expression the generous patronage accorded us during the years. We trust the same will be continued to our successors in the business.

Please note that this transfer does not in any wise affect our publishing the American Bee Journal, or handling bee-books and queens. But we expect from now on to be able to devote more time to the Bee Journal, as for years we have had "too many irons in the fire'lto give it the attention it requires.

GEORGE W. YORK & CO.

Chicago, Ill., Oct. 1, 1903.